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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,463	08/20/2003	Paul C. Goodley	10031215	5934
7590 11/18/2004  AGILENT TECHNOLOGIES, INC. Legal Department, DL429 Intellectual Property Administration P.O. Box 7599			EXAMINER	
			FERNANDEZ, KALIMAH	
			ART UNIT	PAPER NUMBER
			2881	
Loveland, CO	80537-0599		DATE MAILED: 11/18/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

_		Application No.	Applicant(s)			
Office Action Summary		10/644,463	GOODLEY ET AL.			
		Examiner	Art Unit			
	-	Kalimah Fernandez	2881			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	·					
1)	Responsive to communication(s) filed on					
2a)⊠	This action is <b>FINAL</b> . 2b) This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
5)⊠ 6)⊠ 7)⊠	4) Claim(s) 1-25,27,29-35 and 37 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 24,25,27 and 29-32 is/are allowed.  6) Claim(s) 1-5,7-11,13-23,33-35 and 37 is/are rejected.  7) Claim(s) 6 and 12 is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9)	The specification is objected to by the Examine	er.				
10)	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  4) Interview Summary (PTO-413) Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152) 6) Other:						

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 2. Claims 1-5,7-11,13-23,33-35, and 37 stand rejected under 35 U.S.C. 102(e) as being anticipated by US Pat No 6,627,882 issued to Schulz et al.
- 3. As per claims 1,7,9, and 13, Schulz et al disclose an electrospray source of ions for an analyzer (col.8, lines 17-20).
- 4. Schulz et al disclose a reservoir (242) for containing a liquid (col.17, line 63-col.18, line 3).
- 5. Schulz et al disclose a manifold for containing a liquid, the manifold having a plurality of nozzles (col.8, lines 21-31), each of the nozzles having a channel and a plurality of openings operatively connected to the channel (see fig. 5a-b).

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6. Schulz et al disclose a conduit connecting the reservoir (242) to the manifold so that liquid in the manifold can flow from the reservoir through the channel of each of the nozzles and through the openings (col.17, lines 45-50).

- 7. Schulz et al disclose a counter electrode and the openings, the electrical potential difference and the size of the openings being sufficient to enable the liquid to be ejected from the openings in droplets and to enable ions to be ejected from the openings in droplets and to enable ions to be ejected from the droplets (col.4, lines 52-67;col.5, lines 37-65; col.18, lines 3-7).
- 8. Moreover, Schulz et al disclose tips (col.17,lines 50-51).
- 9. As per claims 2,15,21, and 35 Schulz et al disclose a plurality of reservoirs and a plurality of conduits for connected the reservoirs to the manifold (col.17, lines 35-44).
- 10. As per claims 3, 11,16,22 and 33, Schulz et al disclose evenly spaced nozzles (tips) (see fig. 4; col.20, lines 27-31).
- 11. As per claims 4 and 19, Schulz et al disclose an electrode (col.11, lines 30-32; col.12, lines 1-7; col.18, lines 3-7).

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12. As per claims 5, 8, 10, and 14, Schulz et al disclose the openings being 20 micrometers (col.20, lines 57-60).

- 13. As per claims 17-18, Schulz et al disclose an upper housing (252) connected to the conduit and a lower housing connected to the upper housing and containing the tips, wherein the lower housing has a plurality of apertures and a plurality of tubes (see fig. 5a-b).
- 14. As per claims 20,23, 34 and 37, Schulz et al disclose conveying liquid from a reservoir of the liquid from a reservoir of the liquid to a manifold (col.17, line 66-col.18, line 3); conveying the liquid from the manifold to a plurality of openings partly and toward a counter electrode assembly having an ion passageway (see fig.4); producing an electrical potential difference between the fluid at the openings and the counter electrode (col.18, lines 3-7;col.8, lines 34-39;col.5, lines 37-65); causing the liquid to be ejected from the openings in droplets and ions to be ejected from the droplets (col.12, lines 17-29). Further, Schulz et al disclose a mass spectrometer detector (col.12, lines 25-29).

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### Allowable Subject Matter

15. Claims 24-25,27,29-32 allowed. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach or fairly suggest a slanted tip as recited in claim 24.

16. For the same reason, claims 6 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Response to Arguments

17. Applicant's arguments filed 8-11-04 have been fully considered but they are not persuasive. Applicant argues several points: 1) Schultz fails to teach a plurality of openings connected to the channel; 2) Schultz fails to teach an electrode for producing an electric potential at the reservoir; and 3) Schultz fails to teach a counter electrode assembly having an ion passageway. Each will be addressed in turn.

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18. First, MPEP 2111 require claim be given its broadest reasonable interpretation. Here, present claim 1 recites a "manifold having a plurality of nozzles, each of the nozzles having a channel and a plurality of openings operatively connected to the channel." Schultz reads on this limitation because nozzles (232) having a channel (224) and two openings at the distal end for dispersing the sample and the other at the capillary end for receiving the sample. This interpretation is supported in applicant's specification (see for example pg.8, lines 10-28).

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- 19. Second, applicant argues Schultz fails to teach an electrode as recited in claims 4, 7-12, 19, and 31. In response, Schultz discloses the fluid being subject to a potential voltage via an electrode associated with the reservoir (242) (see col.17, line 63- col.18, line 15). The strict test of anticipation is satisfied when each and every element is disclosed by the prior art. Here, Schultz discloses a reservoir electrode for optimizing fluid flow. This disclosure anticipates the disputed limitation.
- 20. Third, Schultz discloses a counter-electrode within the broadest reasonable interpretation (see col.22, lines 7-28). The strict test of anticipation does not require an "ipsissimis verbis test, i.e., identity of terminology is not required." Rather, an element, which is arranged and

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function as a claimed element satisfies anticipation. Here, Schultz teach "additional electrode" that functions to modify and optimize the electric field and is arranged as after the nozzle (see col. 22, lines 17-28). This disclosure encompasses the recited counter-electrode because a counter-electrode modifies the electric field to enhance focusing and is situated after a nozzle.

#### Conclusion

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalimah Fernandez whose telephone number is 571-272-2470. The examiner can normally be reached on Mon-Tues 6:30-3:30; Wed-Thurs 8-5 and Fri.9am-6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KF